Data Sheet
FUJITSU Server PRIMERGY RX100 S8 Mono socket 1U rack server

Small in size and low in cost – rich in optional features

The Fujitsu Server PRIMERGY RX Rack Server family is the perfect platform to form dynamic infrastructures for your business processes today and in the coming decade. You will thus benefit several times over from our recognized experience in optimized data center technology and our innovative strength in developing energy-efficient and cost/performance-optimized rack systems for universal use. PRIMERGY rack servers, built upon industry standards, focus from a functional viewpoint on core features: energy efficiency, reliability, optimized for virtualization, ease of operation and maintenance, flexibility for your future. And thus they notably meet your requirements for outstanding cost efficiency. Optimal operating costs and long-term usability comply with the IT quality required by your customers. Our responsibility goes way beyond the hardware as our tailor-made service packages mean that you can rely on the best support for your IT during its whole lifecycle.

PRIMERGY RX100 S8

The Fujitsu PRIMERGY RX100 S8 is an entry mono socket Intel® x86 rack server designed to provide a solution for small budgets, yet enabling a rich set of optional expansions to best meet individual demands. Its usage patterns cover file, infrastructure and communication applications by delivering up to 32GB RAM, up to 3 PCIe slots and up to 10 hard disk drives. Moreover, this 1U server enables individual configuration with a rich set of optional features, such as hot-plug 94% efficient power supply units, redundant fan, RAID controller and the choice of Intel® Xeon® E3, Intel® Core® i3 and Intel® Pentium® processors. By delivering the high energy efficiency and operation in higher ambient temperature, the RX100 S8 also contributes to the lowest operational costs. Furthermore, the ServerView™ suite and remote management features (iRMC S4) simplify the administration.

Features & Benefits

Main Features	Benefits
Low in costs	
■ High energy efficient	■ Clear reduction in energy costs
■ Fujitsu ServerView™ suite and onboard remote management features (iRMC S4) enables centralized management	■ Comprehensive and simplified management reduce time for standard administration tasks
■ Cool-safe® Advanced Thermal Design enables operation in a higher ambient temperature	■ Each additional degree means approximately 5-6 percent less energy costs for air-conditioning
Flexible foundation for infrastructure tasks	
■ Intel Xeon processor E3-1200 v3 and up to 32GB RAM, up to 3 PCIe slots and up to 10 hard disk drives	■ Cost-optimized foundation for file, infrastructure and communication applications
■ Free choice: Up to 4x 3.5" or up to 8x 2.5" storage or 10x 2.5" (as soon as released)	■ Flexible to meet the individual demand
■ Optional pGFX Server Graphics	■ Huge storage capacity fulfill requirements of storage demanding application or services
■ Nexperience Design and enhanced control panel	■ Unprecedented media transcoding performance ■ Enhanced usability
Rich set of optional features	
■ Choice of Intel® Xeon® E3 v3, Core™ i3, Celeron® and Pentium® processors	■ Perfectly meet the performance requirements with available budget
■ Modular RAID controllers	■ Match redundancy requirements with available budget
■ Redundant fans	
■ Hot-plug and redundant power supply (PSU) with platinum efficiency (94%)	
■ Full-height PCIe slot	

Technical details

PRIMERGY RX100 S8				
Housing types	Rack	Rack	Rack	Rack
Storage drive architecture	3.5-inch SAS/SATA	3.5-inch SAS/SATA	2.5-inch SAS/SATA	2.5-inch SAS/SATA
Power supply	Standard	Hot-plug	Standard	Hot-plug

Mainboard	
Mainboard type	D3229
Chipset	Intel® C226
Processor quantity and type	1 x Intel® Xeon® processor E3-1200v3 product family / Intel® Core™ i3 processor / Intel® Pentium® processor
Processor	Intel® Celeron® processor G1820 (2C/2T, 2.70 GHz, TLC: 2 MB, Turbo: No, 1,333 MHz, 54 W)
	Intel® Core™ i3-4330 processor (2C/4T, 3.50 GHz, TLC: 4 MB, Turbo: No, 1,600 MHz, 54 W)
	Intel® Pentium® processor G3420 (2C/2T, 3.20 GHz, TLC: 3 MB, Turbo: No, 1,600 MHz, 54 W)
	Intel® Xeon® processor E3-1220v3 (4C/4T, 3.10 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 80 W)
	Intel® Xeon® processor E3-1230Lv3 (4C/8T, 1.80 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 25 W)
	Intel® Xeon® processor E3-1230v3 (4C/8T, 3.30 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 80 W)
	Intel® Xeon® processor E3-1240v3 (4C/8T, 3.40 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 80 W)
	Intel® Xeon® processor E3-1265Lv3 (4C/8T, 2.50 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 45 W)
	Intel® Xeon® processor E3-1270v3 (4C/8T, 3.50 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 80 W)
	Intel® Xeon® processor E3-1280v3 (4C/8T, 3.60 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 82 W)
Memory slots	4 (2 banks with 2 DIMMs each)
Memory slot type	DIMM (DDR3) UDIMM
Memory capacity (min. - max.)	2 GB - 32 GB
Memory protection	ECC
Memory notes	Dual channel support. For dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same.
Memory options	2 GB (1 module(s) 2 GB) DDR3, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM

Interfaces	
USB 2.0 ports	4
USB 3.0 ports	4 x (2x front, 2x rear)
Graphics (15-pin)	1 x VGA (15-pin) / optional 1 x front VGA
Serial connection	1 x serial RS-232-C, usable for iRMC or system or shared
LAN / Ethernet (RJ-45)	2 x Gbit/s Ethernet
Management LAN (RJ45)	1 x dedicated management LAN port for iRMC S4 (10/100/1000 Mbit/s) Management LAN traffic can be switched to shared onboard Gbit LAN port

Onboard or integrated Controller	
RAID controller	Integrated RAID 0/1 or RAID 5/6 controller (option) additional RAID controller options are described under Components RAID controller

Onboard or integrated Controller				
SATA Controller	Intel® C226, 1 port used for accessible drive 4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux;			
LAN Controller	Intel® i210 onboard, 2 x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration), iSCSI, PXE-Boot and WoL are supported			
Remote Management Controller	Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller) IPMI 2.0 compatible			
Trusted Platform Module (TPM)	optional TPM			
Onboard or integrated Controller (Base unit specific)				
RAID controller	4 port SATA with RAID 0/1/10 for HDDs			
SATA Controller	4-port SATA 6Gb with RAID 0, 1, 10			
SATA controller type notes	for hot-plug SATA hard disks			
Slots				
PCI-Express 3.0 x8	2 x Low profile Length 175mm; PCIe slot#1 = dedicated Modular RAID slot			
PCI-Express 2.0 x4 (mech. x8)	1 x Low profile			
Slot Notes	Optional support of 1x full height PCIe Gen3 x8 card, instead of 1x PCIe Gen2 x4 and 1x PCIe Gen3 x8			
Drive bays				
Storage drive bays	4/8 x 2.5-inch hot-plug SAS/SATA or 4x 3.5-inch hot-plug SAS/SATA or 10 x 2.5-inch hot-plug SAS/SATA as soon as released			
Accessible drive bays	1 x 5.25/0.4-inch for CD-RW/DVD			
Notes accessible drives	Following limitations applies to 10x 2.5-inch HDD base unit: No CD-RW/DVD, 1x USB 2.0 at the front, no front VGA			
Drive bays (Base unit specific)				
Storage drive bays	Max. 4x 3.5-inch		Max. 8x 2.5-inch	
Number of fans	4			
Fan notes	4 fans in combination with standard power supply or 5 fans in combination with hot-plug PSU base unit for 1+4 redundancy.			
Number of fans	4	5	4	5
Fan configuration	4 standard fan	5 redundant fan	4 standard fan	5 redundant fan
Fan notes	non redundant / non hot-plug	redundant / non hot-plug	non redundant / non hot-plug	redundant / non hot-plug
Operating panel				
Operating buttons	On/off switch NMI button Reset button			
Status LEDs	System status (orange) Identification (blue) Hard disks access (green) Power (green) At system rear side: System status (orange) Identification (blue) LAN connection (green) LAN speed (green / yellow)			
BIOS				
BIOS features	ROM based setup utility Recovery BIOS BIOS settings save and restore Local BIOS update from USB device Online update tools for main Windows and Linux versions Local and remote update via ServerView Update Manager Remote PXE boot support Remote iSCSI boot support			

Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Microsoft® Hyper-V Server R2 2012
	Microsoft® Windows Server® 2012 R2 Datacenter
	Microsoft® Windows Server® 2012 R2 Standard
	Microsoft® Windows Server® 2012 R2 Essentials
	Microsoft® Windows Server® 2012 R2 Foundation
	Microsoft® Windows Storage Server 2012 R2 Standard
	Microsoft® Hyper-V Server 2012
	Microsoft® Windows Server® 2012 Datacenter
	Microsoft® Windows Server® 2012 Standard
	Microsoft® Windows Server® 2012 Essentials
	Microsoft® Windows Server® 2012 Foundation
	Microsoft® Windows Storage Server 2012 Standard
	Microsoft® Hyper-V™ Server 2008 R2
	Microsoft® Windows Server® 2008 R2 Datacenter
	Microsoft® Windows Server® 2008 R2 Enterprise
	Microsoft® Windows Server® 2008 R2 Standard
	Microsoft® Windows Server® 2008 R2 Foundation
	Microsoft® Windows® Web Server 2008 R2
	Microsoft® Windows® Small Business Server 2011 Premium Add-On
	Microsoft® Windows® Small Business Server Standard 2011
	VMware vSphere™ 5.5 Embedded
	VMware vSphere™ 5.5
	SUSE® Linux Enterprise Server 11
	Red Hat® Enterprise Linux 6
	Red Hat® Enterprise Linux 5
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473
Operating system notes	VMware ESX hints: - SATA RAID is not supported - Storing virtual machines locally requires a SAS RAID Controller - Onboard GbE is supported on one of the two ports Support of other Linux derivatives on demand Red Hat® certification starting with version 5.8 / 6.4.

Server Management

Standard	
Option	ServerView Suite - Deploy SV Deployment Manager (full version) ServerView Suite - Maintain iRMC Advanced Pack incl. Advanced Video Redirection (AVR) and Remote Storage ServerView Suite - Dynamize SV Virtual-IO Manager (VIOM) ServerView Suite - Integrate SV Integration pack for Fujitsu ManageNow® solution
Server Management notes	Regarding Operating System dependencies for ServerView Suite software Products see dedicated Product Data sheets.

Dimensions / Weight

Rack (W x D x H)	482.6 mm (Bezel) / 435.4 mm (Body) x 572 x 42.8 mm
Height Unit Rack	1 U
Mounting Cable depth rack	200 mm cable depth
Weight	up to 13 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit as option

Environmental

Operating ambient temperature	5 - 40 °C

Environmental	
Operating temperature note	Cool-Safe™ Advanced Thermal Design (above 35° or below 10° C) depending on configuration (planned). For detailed information see relevant system configurator.
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)
Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe
Sound pressure (LpAm)	24 / 34 dB(A) (min / max idle), 28.5 / 34 db(A) (min / max operating)
Sound power (LWAd; 1B = 10dB)	3.7 / 5.1 B (min / max idle), 4.2 / 5.5 B (min / max operating)
Noise notes	Noise emissions and operation modes depend on system configuration.

Electrical values	
Power supply configuration	1x standard power supply or1x hot-plug power supply or 2x hot plug power supplies for redundancy
Max. output of single power supply	450 W
Standard power supply output	300 W (92% efficiency)
Hot-plug power supply output	450W (94% efficiency)
Hot-plug power supply redundancy	Yes
Rated voltage range	100 V - 127 V / 200 V - 240 V
Rated frequency range	50 Hz - 60 Hz
Rated current max.	4.0 A
Rated current in basic configuration	1.8 A / 0.8 A (100V / 240V)
Active power (max. configuration)	197 W
Active power note	To estimate the power consumption of different configurations use the Power Calculator of the System Architect: http://configurator.ts.fujitsu.com/public/
Apparent power (max. configuration)	199 VA
Heat emission	709.2 kJ/h (672.2 BTU/h)

Compliance	
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronical equipment)
Germany	GS
Europe	CE Class A *
USA/Canada	CSAc/us ULc/us FCC Class A
Japan	VCCI
Russia	GOST
South Korea	KC
China	CCC (planned)
Australia/New Zealand	C-Tick (planned)
Taiwan	BSMI (planned)
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates
Compliance notes	There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request. * Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Components

Storage drives	SSD SATA, 6 Gb/s, 800 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 400 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 200 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 100 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
	HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 3.5-inch, economic
	HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical
	HDD SATA, 6 Gb/s, 250 GB, 7,200 rpm, hot-plug, 3.5-inch, economic
	HDD SATA, 6 Gb/s, 250 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical
	HDD SATA, 6 Gb/s, 4 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 3 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 2 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 2.5-inch, business critical
	HDD SAS, 6 Gb/s, 900 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 600 GB, 15,000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 600 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical
	HDD SAS, 6 Gb/s, 450 GB, 15,000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 450 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 15,000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 15,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 146 GB, 15,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 4 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SAS, 6 Gb/s, 3 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SAS, 6 Gb/s, 2 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SAS, 6 Gb/s, 1.2 TB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SAS, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 2.5-inch, business critical
Optical drives	DVD SuperMulti SATA slim, (8x DVD; 24x CD), slimline, SATA I
SCSI / SAS Controller	SAS Ctrl. 6 Gbit/s 8 ports ext. PCIe Gen2 x8
RAID Controller	RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 5/6 512MB (D2616), 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, Optional BBU (based on LSI SAS2108)
	RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 1GB (D3116C), 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 1 GB, Optional FBU (based on LSI SAS2208)
	RAID 0/1 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 0/1 (D2607), 8 ports int. RAID level: 0, 1, 10, No BBU support
Fibre Channel controller	Fibre Channel Host Bus Adapter 1 x 8 Gbit/s Qlogic QLE2560 MMF LC-style
	Fibre Channel Host Bus Adapter 2 x 8 Gbit/s Qlogic QLE2562 MMF LC-style
	Fibre Channel Host Bus Adapter 1 x 8 Gbit/s Emulex LPe1250 MMF LC-style
	Fibre Channel Host Bus Adapter 2 x 8 Gbit/s Emulex LPe12002 MMF LC-style
	Fibre Channel Host Bus Adapter 1 x 4 Gbit/s#8 Gbit/s#16 Gbit/s Emulex LPe16000B LC-style
	Fibre Channel Host Bus Adapter 2 x 4 Gbit/s#8 Gbit/s#16 Gbit/s Emulex LPe16002B LC-style

Communication, Network	Converged Network Adapter 2 x 10 Gbit/s PCIe Gen2 x8 (Emulex)
	Ethernet Ctrl. 1 x 10 MBit/s#100 MBit/s#1 Gbit/s PCIe Gen1.1 x1 (Intel®)
	Ethernet Ctrl. 1 x 1 Gbit/s PCIe x4 (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s#1 Gbit/s#100 MBit/s PCIe Gen2.1 x8 (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe Gen2 x8 (Fujitsu)
	Ethernet Ctrl. 2 x 1 Gbit/s#100 MBit/s#10 MBit/s PCIe Gen2.1 x4 (Intel®)
	Ethernet Ctrl. 2 x 1 Gbit/s PCIe x4 (Fujitsu)
	Ethernet Ctrl. 4 x 1 Gbit/s#100 MBit/s#10 MBit/s PCIe Gen2.1 x4 (Intel®)
	Ethernet Ctrl. 4 x 1 Gbit/s PCIe x4 (Fujitsu)
Graphics	NVIDIA® Quadro® NVS 300 LP, PCIe x1, 2x DVI/VGA
Rack infrastructure	Rackmount kit full extraction (665mm), tool less mounting, length variable 559-914mm
	Rackmount kit full extraction (665mm), tool less mounting, length variable 559-914mm
	Cable Management 1U for PRIMECENTER- and 3rd-party racks

Warranty	
Standard Warranty	1 year
Service level	Onsite Service (depending on country)
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM
Maintenance and Support Services - the perfect extension	
Support Pack Options	Globally available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4h Onsite Response Time 24x7, 4h Onsite Response Time
Recommended Service	24x7, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life
Service Weblink	http://www.fujitsu.com/fts/services/support

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu PRIMERGY RX100 S8, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio
Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products
www.fujitsu.com/global/services/computing/

Software
www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY RX100 S8, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/fts

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.
Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT.
Please find further information at http://www.fujitsu.com/global/about/environment

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